

Question 1

“What are the procedures now used in your region for economic dispatch?”

Nebraska Public Power District (NPPD) is a member of the Mid-Continent Area Power Pool (MAPP). MAPP does not employ a centralized economic dispatch over the entire MAPP region; rather economic dispatch is accomplished by each member Balancing Authority as described below.

Economic dispatch to serve NPPD wholesale and retail load is accomplished through a combination of commitment of NPPD generation resources to load within the NPPD Balancing Authority and sales and/or purchases with entities external to the NPPD Balancing Authority. Nebraska has been very effective at economic dispatch with an average retail price per kWh 25% below the national average (2004 EIA data).

“Who is performing the dispatch (a utility, an ISO or RTO or other) and over how large an area (geographic scope, MW load, MW generation resources, number of retail customers within the dispatch area?”

NPPD performs economic dispatch for all NPPD generation resources within the NPPD Balancing Authority area to meet its obligations to serve its wholesale and retail load. Other entities, such as municipal utilities, cooperatives, and joint action agencies serving load within the NPPD Balancing Authority Area also dispatch their generation resources to serve their load and schedule purchases and/or sales with entities external to the NPPD Balancing Authority. Many of the NPPD generation resources are under joint participation agreements with municipalities who have rights to dispatch their participation amount, as they deem appropriate.

NPPD’s geographic scope includes all or parts of 91 of the 93 counties in Nebraska. NPPD serves the total wholesale power requirements of 24 public power districts and rural cooperatives, 52 municipal customers and two partial requirements municipal customers in Nebraska. NPPD also serves more than 87,000 customers at the retail level. NPPD owns 3200 MW of generation resources and has a peak load of 2554 MW. The peak load in the NPPD Balancing Authority is 3229 MW. NPPD owns and operates 4,300 miles of transmission. In total, NPPD serves 800,000 customers in Nebraska.

Question 2

“Is the Act’s definition of economic dispatch (see above) appropriate?”

The Act’s definition of economic dispatch is not appropriate unless it is interpreted to include contractual, regulatory, and environmental limits or

requirements, in addition to recognizing any operational limits of generation and transmission facilities. This definition should also be interpreted to include the total cost of serving customers including system losses and the operational limits of the entire electric system in the region. There are times, although they are rare, when local generation at the distribution level may need to be dispatched to maintain reliability.

“Over what geographic scale or area should economic dispatch be practiced?”

The scale or area for which economic dispatch should be practiced is that geographic scale or area for which an entity has an obligation to serve whether that obligation arises from federal, state or local law, or under a long-term contract to provide electric service to end users or to a distribution utility. When one considers that bilateral sales and purchases are another form of economic dispatch, the geographic scale is limited only to the extent that transmission service and system losses make the purchase or sale economical and reliable.

“Besides cost and reliability, are there any other factors or considerations that should be considered in economic dispatch, and why?”

As noted above, contractual, regulatory, and environmental limits or requirements, as well as the total cost of serving customers including system losses, should be considered in economic dispatch.

Question 3

“How do economic dispatch procedures differ for different classes of generation, including utility-owned versus non-utility generation?”

Nebraska is a totally public power state and there is almost no non-utility generation in the NPPD Balancing Authority area.

NPPD performs economic dispatch for all NPPD generation resources within the NPPD Balancing Authority area and includes purchases from non-utility owned generation within the Balancing Authority areas of external entities through scheduled power purchases. NPPD will dispatch non-utility resources in this manner to the extent NPPD has a contractual right to dispatch the generation pursuant to a power purchase contract and the total delivered cost to NPPD of the resource justifies it being economically dispatched when compared with other options. Other entities, such as municipal utilities and joint action agencies, within the NPPD Balancing Authority Area also dispatch resources for their load.

“Do actual operational practices differ from the formal procedures required under tariff or federal or state rules, or from the economic dispatch definition above?”

Actual operational practices do not differ from the formal procedures required under tariff or federal or state rules

“If there is a difference, please indicate what the difference is, how often this occurs, and its impact upon non-utility generation and upon retail electricity users.”

Not applicable.

Question 4

“What changes in economic dispatch procedures would lead to more non-utility generation dispatch?”

Dispatch of non-utility generation should not be considered unless it reduces the cost to the end-use customer. NPPD’s existing economic dispatch procedures include consideration of non-utility generation (i.e., lowest cost to end-use customers) mix of resources at any given time. As such, no changes in existing procedures are required.

“If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by non-utility generators, please explain the changes you recommend.”

Not applicable

Question 5

“If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have – on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions and other impacts?”

NPPD currently plans and operates its generation and transmission based on least cost principles, which includes the use of non-utility resources to the extent this use lowers NPPD’s total costs. The impacts of more non-utility generation could impact the grid, depending on the location of the increased generation. There may be locations that require a minimum amount of generation to maintain system reliability. If the non-utility generation was planned into the overall power system there is less likelihood of negative consequences by running this generation. However, the regulatory trend of approving the interconnection of new generation facilities based on

interconnection studies, which do not assess the deliverability of the generation to load, prior to any request for transmission service for the delivery of the new generation facilities, increases the likelihood that non-utility generation will adversely impact the grid.

“How would this affect retail customers in particular states or nationwide?”

These least cost economic dispatch principles used by NPPD provide its customers, including its retail customers, with the lowest possible price. NPPD would expect that other utilities employing these principles would see a similar result.

Question 6

“Could there be any implications for grid reliability – positive or negative – from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability?”

If economic dispatch causes greater dispatch and use of non-utility generation, and if the generation has been effectively planned and integrated into the transmission system including obtaining transmission capacity rights to deliver the generation to load and studies of system reliability impacts, no negative impacts would be expected. However, the regulatory trend of approving the interconnection of new generation facilities based on interconnection studies, which do not assess the deliverability of the generation to load, prior to any request for transmission service for the delivery of the new generation facilities, increases the likelihood that non-utility generation will adversely impact the grid.